

A Preliminary Floral Survey of Quadrants E3 and E4 at Greenwoods Conservancy

*Emily L'Heureux Simpson**

INTRODUCTION

Greenwoods Conservancy, Burlington, New York, is a thousand-acre property that has been placed under a conservation easement by the Otsego Lake Trust. The purpose of this easement is to allow this land, which houses a variety of ecosystems including a wetland, to remain protected and to provide a diverse and unspoiled area for research (King, 1994; Meyers, 1994). In an attempt to further classify and characterize the many biotope types existing in the conservancy, a series of preliminary qualitative surveys, including the following on quadrants E3 and E4 (Figure 1), have been conducted on the flora at Greenwoods. This survey also includes an attempt to look at the nutritional and medicinal values of some of the plants found within these quadrants.

METHODS AND MATERIALS

During the summer of 1995 on July 5, 10, 17, 18, 26, and August 9, vascular plants were collected within the quadrants E3 and E4, at Greenwoods Conservancy. The quadrants were further subdivided into five separate areas (Tables 1-6). On each sampling date at least three and up to seven people went over these areas to collect at least one of each species existing there. Plants were also collected from the more disturbed area along the road. Each plant was placed in a plastic bag, then in either a cardboard box or metal vasculum to preserve them until they could be pressed. The collected plants were placed inside two sheets of newspaper and placed in wooden presses. Pieces of cardboard and blotter paper were put between the newspaper to draw out the moisture. They were then dried in an industrial oven at 100° for approximately 15 hours. Later the plants were identified (Brown, 1979; Cobb, 1963; Fernald, 1950; Knobel, 1977; Peterson, 1977; Peterson, 1982; Petrides, 1972; Prescott, 1969; Preston, 1976; Zim, 1950). Other reference books were consulted to determine which of these plants were useful nutritionally and medicinally (Boericke, 9th edition; Peterson, 1977). The identified plants were then mounted on herbarium paper and sorted according to the location at which they were found. The mounted plants will be added to the Greenwoods Conservancy Herbarium where they will be used as future references.

*OCCA FHV Mecklenburg intern, summer 1995. Present Address: Morris Central School, Morris, NY.

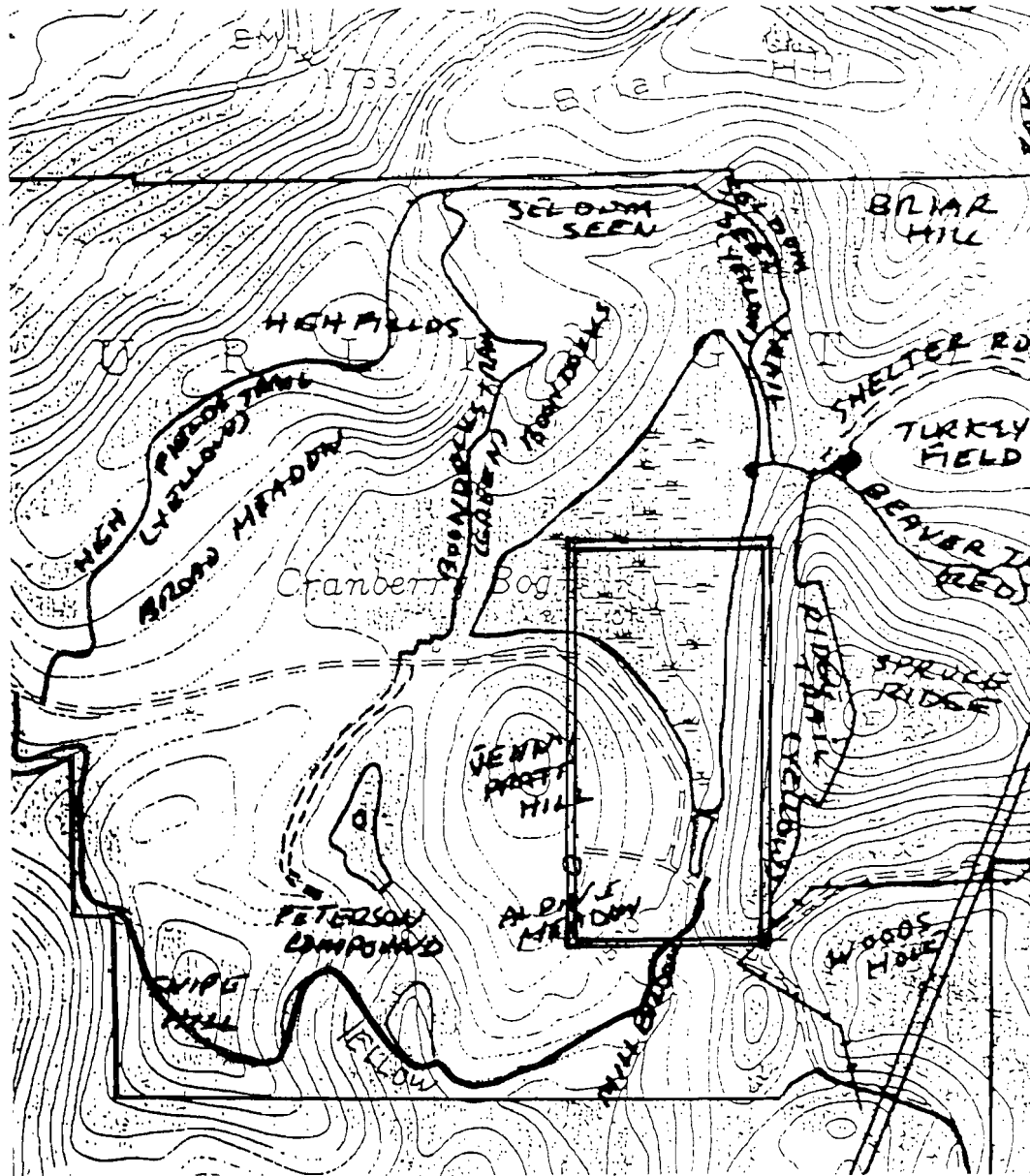


Figure 1. Cranberry Bog region showing area of study (closed rectangle).

Table 1. Plants collected during this study: E3-E4 East Side.

Order: CAMPANULATAE	
Family: Compositae	
<i>Anaphalis margaritacea</i>	Pearly Everlasting
<i>Aster acuminatus</i>	Whorled Wood Aster
<i>Aster cordifolius</i>	Heart-leaved Aster
<i>Cirsium palustre</i>	Marsh Thistle+
<i>Erigeron annuus</i>	Daisy Fleabane
<i>Solidago altissima</i>	Tall Goldenrod
<i>Solidago gigantea</i>	Late Goldenrod
<i>Solidago graminifolia</i>	Lance-leaved Goldenrod
<i>Solidago juncea</i>	Early Goldenrod
<i>Solidago odora</i>	Sweet Goldenrod
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod
<i>Solidago tenuifolia</i>	Slender Fragrant Goldenrod
<i>Solidago uliginosa</i>	Bog Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
Order: CONIFERALES	
Family: Pinaceae	
<i>Picea abies</i>	Norway Spruce
<i>Pinus banksiana</i>	Jack Pine
<i>Pinus resinosa</i>	Red Pine
<i>Pinus</i> sp.	Pine
<i>Tsuga canadensis</i>	Eastern Hemlock
Order: CONTORTAE (GENTIANALES)	
Family: Asclepiadaceae	
<i>Asclepias syriaca</i>	Common Milkweed
Order: EUFILICALES	
Family: Polypodiaceae	
<i>Athyrium Filix-femina</i>	Lady Fern
<i>Dennstaedtia punctilobula</i>	Hayscented Fern
Unknown #1	
Unknown #2	
Order: FAGALES	
Family: Corylaceae (Betulaceae)	
<i>Betula lenta</i>	Black Birch
<i>Ostrya virginiana</i>	Eastern Hophornbeam
Family: Fagaceae	
<i>Fagus grandifolia</i>	Beech
Order: GLUMIFLORAE (GRAMINALES)	
Family: Cyperaceae	

<i>Carex bullata</i>	Sedge
<i>Carex scoparia</i>	Sedge
<i>Eleocharis ovata</i>	Spike Rush
<i>Scirpus cyperinus</i>	Wool Grass
Family: Graminae	
<i>Danthonia spicata</i>	Poverty Grass
<i>Glyceria canadensis</i>	Rattlesnake Grass
<i>Phalaris arundinacea</i>	Reed Canary Grass
Unknown #6	
Order: LILIIFLORAE (LILIALES)	
Family: Juncaceae	
<i>Juncus tenuis</i>	Path Rush
Family: Liliaceae	
<i>Smilacina racemosa</i>	False Solomon's-seal
Order: LYCOPODINAE	
Family: Lycopodiaceae	
<i>Lycopodium tristachyum</i>	Ground Cedar
Order: MICROSPERMAE (ORCHIDALES)	
Family: Orchidaceae	
<i>Epipactis Helleborine</i>	Helleborine*
<i>Habenaria orbiculata</i>	Round-leaved Orchis
Order: MYRTILORAE (MYROTALES)	
Family: Onagraceae	
<i>Circaea alpina</i>	Smaller Enchanter's Nightshade
<i>Epilobium coloratum</i>	Purple-leaved Willow Herb
Order: OLEALES	
Family: Oleaceae	
<i>Fraxinus nigra</i>	Black Ash
Order: PARIETALES (VIOLALES)	
Family: Guttiferae	
<i>Hypericum mutilum</i>	Dwarf St. Johnswort
<i>Hypericum perforatum</i>	Common St. Johnswort
<i>Hypericum virginicum</i>	Marsh St. Johnswort
Order: PLANTAGINALES	
Family: Plantaginaceae	
<i>Plantago major</i>	Common Plantain*
Order: POLYGONALES	
Family: Polygonaceae	
<i>Polygonum sagittatum</i>	Arrow-leaved Tearthumb
Order: RANALES (RANUNCULALES)	
Family: Ranunculaceae	
<i>Clematis virginiana</i>	Virgin's Bower
Order: RHOEADALES (PAPAVERALES)	
Family: Cruciferae	

<i>Barbarea vulgaris</i>	Winter Cress*
<i>Nasturtium officinale</i>	Water Cress*
Unknown #5	

Order: ROSALES

Family: Leguminosae	
^ <i>Robinia Pseudo-Acacia</i>	Black Locust
Family: Rosaceae	
<i>Crataegus</i> sp.	Hawthorne
<i>Potentilla norvegica</i>	Rough Cinquefoil
<i>Rubus allegheniensis</i>	Blackberry
<i>Rubus</i> sp.	Bramble
<i>Rubus</i> sp.	Bramble
<i>Spiraea latifolia</i>	Meadow Sweet
Family: Saxifragaceae	
<i>Ribes cynosbati</i>	Pasture Gooseberry

Order: RUBIALES

Family: Caprifoliaceae	
<i>Viburnum recognitum</i>	Northern Arrowwood
Family: Rubiaceae	
<i>Galium trifolium</i>	Fragrant Bedstraw

Order: SAPINDALES

Family: Aceraceae	
<i>Acer saccharum</i>	Sugar Maple
Family: Balsaminaceae	
<i>Impatiens capensis</i>	Jewel Weed

Order: TUBIFLORAE (POLEMONIALES)

Family: Labiatae	
<i>Agastache Foeniculum</i>	Blue Giant Hyssop
<i>Mentha arvensis</i>	Wild Mint
<i>Scutellaria</i> sp.	Skullcap
Unknown #3	
Unknown #4	
Family: Scrophulariaceae	
<i>Mimulus ringens</i>	Square-stemmed Monkey Flower
Family: Solanaceae	
<i>Solanum dulcamera</i>	Bittersweet Nightshade
Family: Verbenaceae	
<i>Verbena hastata</i>	Blue Vervain

Unknown #7
 Unknown #8
 Unknown #9
 Unknown #10

*Alien Species

+Alien in part

^Species seen but not collected

Table 2. Plants collected during this study: Below Gate West Side.

Order: CAMPANULATAE	
Family: Compositae	
<i>Arctium</i> sp.	Burdock*
<i>Chrysanthemum leucanthemum</i>	Ox-eye Daisy*
<i>Cirsium altissimum</i>	Tall Thistle
<i>Cirsium palustre</i>	Marsh Thistle+
<i>Erigeron annuus</i>	Daisy Fleabane
<i>Rudbeckia hirta</i>	Black-eyed Susan
<i>Solidago altissima</i>	Tall Goldenrod
<i>Solidago gigantea</i>	Late Goldenrod
<i>Solidago graminifolia</i>	Lance-leaved Goldenrod
<i>Solidago ulmifolia</i>	Elm-leaved Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
Order: CENTROSPERMAE (CARYOPHYLLALES)	
Family: Caryophyllaceae	
<i>Stellaria graminea</i>	Lesser Stitchwort*
Order: CONIFERALES	
Family: Pinaceae	
<i>Pinus banksiana</i>	Jack Pine
<i>Pinus resinosa</i>	Red Pine
<i>Pinus</i> sp.	Pine
<i>Tsuga canadensis</i>	Eastern Hemlock
Order: CONTORTAE (GENTIANALES)	
Family: Asclepiadaceae	
<i>Asclepias</i> sp.	Milkweed
Order: ERICALES	
Family: Pyrolaceae	
<i>Pyrola elliptica</i>	Shinleaf
Order: EUFILICALES	
Family: Polypodiaceae	
<i>Athyrium filix-femina</i>	Lady Fern
<i>Dennstaedtia punctilobula</i>	Hayscented Fern
<i>Dryopteris boottii</i>	Boott's Fern
<i>Dryopteris intermedia</i>	Evergreen Woodfern
<i>Pteridium aquilinum</i>	Bracken Fern
<i>Woodwardia virginica</i>	Virginia Chain Fern

Unknown #1
Unknown #2

- Order: FAGALES
 Family: Corylaceae (Betulaceae)
Betula lenta Black Birch
Ostrya virginiana Eastern Hophornbeam
 Family: Fagaceae
Castanea dentata American Chestnut
Fagus grandifolia Beech
Quercus rubra Red Oak
- Order: GERANIALES
 Family: Geraniaceae
Geranium robertianum Herb Robert
 Family: Oxalidaceae
Oxalis montana Common Wood Sorrel
- Order: GLUMIFLORAE (GRAMINALES)
 Family: Cyperaceae
Scirpus atrovirens Dark Green Bulrush
- Family: Graminae
Agrostis alba Red Top
Anthoxanthum odoratum Sweet Vernal Grass
Panicum virgatum Switch Grass
Phleum pratense Timothy
 Unknown #3
 Unknown #4
 Unknown #5
 Unknown #6
- Order: MICROSPERMAE (ORCHIDALES)
 Family: Orchidaceae
Epipactis helleborine Helleborine*
- Order: OLEALES
 Family: Oleaceae
Fraxinus americana White Ash
- Order: PARIETALES (VIOLALES)
 Family: Guttiferae
Hypericum perforatum Common St. Johnswort
- Order: POLYGONALES
 Family: Polygonaceae
Polygonum arifolium Tearthumb
Polygonum scandens Climbing False Buckwheat
- Order: PRIMULALES
 Family: Primulaceae
Lysimachia terrestris Yellow Loosestrife

Order: RANALES (RANUNCULALES)

Family: Ranunculaceae

Ranunculus acris

Buttercup*

Thalictrum dioicum

Early Meadow-rue

Order: ROSALES

Family: Leguminosae

Trifolium agrarium

Hop Clover*

Family: Rosaceae

Crataegus sp.

Hawthorne

Crataegus sp.

Hawthorne

Fragaria virginiana

Strawberry

Geum virginianum

Rough Avens

Rubus sp.

Bramble

Rubus sp.

Dewberry

Order: RUBIALES

Family: Caprifoliaceae

Sambucus canadensis

Common Elderberry

Viburnum recognitum

Northern Arrowwood

Viburnum sp.

Arrowwood

Family: Rubiaceae

Galium triflorum

Fragrant Bedstraw

Galium boreale

Northern Bedstraw

Family: Valerianaceae

Valeriana officinalis

Valerian

Order: SAPINDALES

Family: Aceraceae

Acer pensylvanicum

Striped Maple

Acer rubrum

Red Maple

Acer saccharum

Sugar Maple

Order: TUBIFLORAE (POLEMONIALES)

Family: Labiatae

Mentha arvensis

Wild Mint

Family: Scrophulariaceae

Veronica chamaedrys

Bird's Eye Speedwell*

Unknown #7

Unknown #8

Unknown #9

Unknown #10

Unknown #11

*Alien Species

+Alien in part

Table 3. Plants collected during this study: Above Gate West Side.

Order: CAMPANULATAE	
Family: Compositae	
<i>Aster acuminatus</i>	Whorled Wood Aster
<i>Hieracium floribundum</i>	Smoothish Hawkweed*
<i>Hieracium gronovii</i>	Hairy Hawkweed
<i>Prenanthes</i> sp.	White Lettuce
<i>Solidago gigantea</i>	Late Goldenrod
<i>Solidago graminifolia</i>	Lance-leaved Goldenrod
<i>Solidago juncea</i>	Early Goldenrod
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod
<i>Solidago stricta</i>	Wandlike Goldenrod
<i>Solidago tenuifolia</i>	Slender Fragrant Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
Unknown #1	
Unknown #2	
Order: CONIFERALES	
Family: Pinaceae	
<i>Pinus resinosa</i>	Red Pine
Order: EUFILICALES	
Family: Polypodiaceae	
<i>Athyrium filix-femina</i>	Lady Fern
<i>Dryopteris americana</i>	Mountain Woodfern
<i>Onoclea sensibilis</i>	Sensitive Fern
<i>Polystichum acrostichoides</i>	Christmas Fern
<i>Woodwardia virginica</i>	Virginia Chainfern
Order: EQUISETALES	
Family: Equisetacea	
<i>Equisetum sylvaticum</i>	Wood Horsetail
Order: FAGALES	
Family: Corylaceae (Betulaceae)	
<i>Betula lenta</i>	Black Birch
<i>Corylus americana</i>	American Hazlenut
<i>Ostrya virginiana</i>	Eastern Hophornbeam
Family: Fagaceae	
<i>Fagus grandifolia</i>	Beech
Order: GERANIALES	
Family: Oxalidaceae	
<i>Oxalis montana</i>	Common Wood Sorrel
Order: GLUMIFLORAE (GRAMINALES)	

Family: Cyperaceae	
<i>Carex stipata</i>	Sedge
Family: Graminae	
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass
<i>Danthonia spicata</i>	Poverty Grass
Unknown #3	
Unknown #4	
Unknown #5	
Unknown #6	
Unknown #7	
Unknown #8	
Unknown #9	
Unknown #10	
Unknown #11	
Unknown #12	
Order: LILIIFLORAE (LILIALES)	
Family: Juncaceae	
<i>Juncus marginatus</i>	Grass-leaved Rush
Family: Liliaceae	
<i>Medeola virginiana</i>	Indian Cucumber Root
<i>Smilacina stellata</i>	Starry False Solomon's-seal
<i>Smilacina</i> sp.	False Solomon's-seal
<i>Trillium</i> sp.	
Order: OLEALES	
Family: Oleaceae	
<i>Fraxinus americana</i>	White Ash
Order: PRIMULALES	
Family: Primulaceae	
<i>Trientalis borealis</i>	Star Flower
Order: RANALES (RANUNCULALES)	
Family: Ranunculaceae	
<i>Anemone quinquefolia</i>	Wood Anemone
<i>Coptis groenlandica</i>	Goldthread
<i>Ranunculus acris</i>	Buttercup*
<i>Thalictrum polygamum</i>	Tall Meadow-rue
Order: RHAMNALES	
Family: Rhamnaceae	
<i>Rhamnus alnifolia</i>	Alderleaf Buckthorn
Order: ROSALES	
Family: Hamamelidaceae	
<i>Hamamelis virginiana</i>	Witch-hazel
Family: Leguminosae	
<i>Trifolium procumbens</i>	Smaller Hop Clover*
Family: Rosaceae	
<i>Duchesnea indica</i>	Indian Strawberry*
<i>Fragaria virginiana</i>	Common Strawberry
<i>Potentilla canadensis</i>	Dwarf Cinquefoil
<i>Potentilla recta</i>	Rough Fruited Cinquefoil*

<i>Prunus</i> sp.	Cherry
<i>Rubus allegheniensis</i>	Blackberry
<i>Rubus</i> sp.	Bramble
<i>Rubus</i> sp.	Bramble
<i>Rubus</i> sp.	
<i>Spiraea latifolia</i>	Meadow Sweet
Order: RUBIALES	
Family: Caprifoliaceae	
<i>Viburnum alnifolium</i>	Hobble Bush
<i>Viburnum recognitum</i>	Northern Arrowwood
Family: Rubiaceae	
<i>Galium triflorum</i>	Fragrant Bedstraw
<i>Mitchella repens</i>	Partridgeberry
Order: SAPINDALES	
Family: Aceraceae	
<i>Acer pensylvanicum</i>	Striped Maple
<i>Acer rubrum</i>	Red Maple
<i>Acer saccharum</i>	Sugar Maple
Family: Balsaminaceae	
<i>Impatiens capensis</i>	Jewel Weed
Order: TUBIFLORAE (POLEMONIALES)	
Family: Labiatae	
<i>Mentha arvensis</i>	Wild Mint
Family: Scrophulariaceae	
<i>Veronica officinalis</i>	Common Speedwell+
<i>Veronica</i> sp.	Speedwell
Order: UMBELLIFLORAE (UMBELLALES)	
Family: Cornaceae	
<i>Cornus alternifolia</i>	Alternate-leaf Dogwood
Unknown #13	
Unknown #14	
Unknown #15	
Unknown #16	
Unknown #17	
Unknown #18	
Unknown #19	
Unknown #20	
Unknown #21	
Unknown #22	
Unknown #23	
Unknown #24	
Unknown #25	
Unknown #26	
Unknown #27	
*Alien Species	
+Alien in part	

Table 4. Plants collected during this study: E4 Bog West Side.

Order: CAMPANULATAE	
Family: Compositae	
<i>Cirsium palustre</i>	Marsh Thistle+
<i>Solidago altissima</i>	Tall Goldenrod
<i>Solidago canadensis</i>	Canada Goldenrod
<i>Solidago gigantea</i>	Late Goldenrod
<i>Solidago graminifolia</i>	Lance-leaved Goldenrod
<i>Solidago juncea</i>	Early Goldenrod
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod
<i>Solidago tenuifolia</i>	Slender Fragrant Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
<i>Solidago</i> sp.	Goldenrod
Order: ERICALES	
Family: Ericaceae	
<i>Vaccinium corymbosum</i>	Blueberry
Order: EUFILICALES	
Family: Polypodiaceae	
<i>Onoclea sensibilis</i>	Sensitive Fern
Order: FAGALES	
Family: Corylaceae (Betulaceae)	
<i>Alnus rugosa</i>	Speckled Alder
Order: GLUMIFLORAE (GRAMINALES)	
Family: Cyperaceae	
<i>Carex lurida</i>	Sedge
<i>Carex scoparia</i>	Sedge
<i>Scirpus cyperinus</i>	Wool Grass
Family: Graminae	
<i>Agrostis scabra</i>	Hair Grass
<i>Poa alsodes</i>	Grove Meadow Grass
<i>Glyceria canadensis</i>	Rattlesnake Grass
Order: LILIIFLORAE (LILIALES)	
Family: Juncaceae	
<i>Juncus effusus</i>	Soft Rush
Order: PARIETALES (VIOLALES)	
Family: Guttiferae	
<i>Hypericum ellipticum</i>	Pale St. Johnswort
<i>Hypericum virginicum</i>	Marsh St. Johnswort
Order: POLYGONALES	
Family: Polygonaceae	
<i>Polygonum sagittatum</i>	Arrow-leaved Tearthumb

- Order: PRIMULALES
 Family: Primulaceae
Lysimachia terrestris Yellow Loosestrife
- Order: RANALES (RANUNCULALES)
 Family: Ranunculaceae
Anemone riparia Thimbleweed
- Order: ROSALES
 Family: Leguminosae
Coronilla varia Crown Vetch*
 Family: Rosaceae
Potentilla canadensis Dwarf Cinquefoil
Potentilla norvegica Rough Cinquefoil
Rubus sp. Bramble
- Order: RUBIALES
 Family: Caprifoliaceae
Viburnum recognitum Northern Arrowwood
 Family: Rubiaceae
Galium triflorum Fragrant Bedstraw
- Order: SALICALES
 Family: Salicaceae
Salix gracilis Meadow Willow
- Order: SAPINDALES
 Family: Aceraceae
Acer rubrum Red Maple
 Family: Balsaminaceae
Impatiens capensis Jewel Weed
- Order: TUBIFLORAE (POLEMONIALES)
 Family: Labiatae
Scutellaria epilobiifolia Common Skullcap
 Family: Scrophulariaceae
Mimulus ringens Square-stemmed Monkey Flower
 Family: Verbenaceae
Verbena hastata Blue Vervain
- Order: UMBELLIFLORAE (UMBELLALES)
 Family: Umbelliferae
Cicuta bulbifera Bulb-bearing Water Hemlock

*Alien Species

+Alien in part

Table 5. Plants collected during this study: E3 Bog West Side.

Order: CAMPANULATAE	
Family: Compositae	
<i>Achillea ptarmica</i>	Sneezeweed Yarrow*
<i>Aster divaricatus</i>	White Wood Aster
<i>Aster</i> sp.	Aster
<i>Cacalia tuberosa</i>	Plantain
<i>Chrysanthemum leucanthemum</i>	Ox-eye Daisy*
Order: CENTROSPERMAE (CARYOPHYLLALES)	
Family: Caryophyllaceae	
<i>Cerastium vulgatum</i>	Mouse-ear Chickweed*
<i>Stellaria pubera</i>	Star Chickweed
Order: CONIFERALES	
Family: Pinaceae	
<i>Tsuga canadensis</i>	Eastern Hemlock
Order: ERICALES	
Family: Ericaceae	
<i>Vaccinium corymbosum</i>	Highbush Blueberry
<i>Vaccinium</i> sp.	Blueberry
Family: Pyrolaceae	
<i>Monotropa uniflora</i>	Indian Pipe
<i>Pyrola elliptica</i>	Shinleaf
Order: EUFILICALES	
Family: Osmundaceae	
<i>Osmunda cinnamomea</i>	Cinnamon Fern
<i>Osmunda claytoniana</i>	Interrupted Fern
Family: Polypodiaceae	
<i>Athyrium filix-femina</i>	Lady Fern
<i>Dryopteris spinulosa</i>	Spinulose Woodfern
<i>Onoclea sensibilis</i>	Sensitive Fern
Unknown #1	
Unknown #5	
Order: FAGALES	
Family: Fagaceae	
<i>Fagus grandifolia</i>	Beech
<i>Quercus muehlenbergii</i>	Chinkapin Oak
<i>Quercus rubra</i>	Northern Red Oak
Order: GERANIALES	
Family: Oxalidaceae	
<i>Oxalis montana</i>	Common Wood-sorrel
<i>Oxalis stricta</i>	Yellow Wood-sorrel
Order: GLUMIFLORAE (GRAMINALES)	
Family: Cyperaceae	

<i>Carex stipata</i>	Sedge
Family: Graminae	
<i>Deschampsia flexuosa</i>	Hair Grass
Unknown #6	
Unknown #7	
Order: LILIIFLORAE (LILIALES)	
Family: Iridaceae	
<i>Iris versicolor</i>	Blue Flag
Family: Liliaceae	
<i>Maianthemum canadese</i>	Wild Lily of the Valley
<i>Smilacina racemosa</i>	False Solomon's-seal
<i>Smilacina stellata</i>	Starry False Solomon's-seal
Order: MALVALES	
Family: Malvaceae	
<i>Malva moschata</i>	Musk Mallow*
Order: MYRTILORAE (MYROTALES)	
Family: Onagraceae	
<i>Circaea alpina</i>	Smaller Enchanter's Nightshade
<i>Oenothera fruticosa</i>	Sundrops
Order: OLEALES	
Family: Oleaceae	
<i>Fraxinus americana</i>	White Ash
Order: PANDANALES	
Family: Sparganiaceae	
<i>Sparganium</i> sp.	Burr Reed
Order: PARIETALES (VIOLALES)	
Family: Guttiferae	
<i>Hypericum mutilum</i>	Dwarf St. Johnswort
<i>Hypericum perforatum</i>	Common St. Johnswort
<i>Hypericum virginicum</i>	Marsh St. Johnswort
Family: Violaceae	
<i>Viola conspersa</i>	Dog Violet
Order: PLANTAGINALES	
Family: Plantaginaceae	
<i>Plantago lanceolata</i>	English Plantain*
Order: POLYGONALES	
Family: Polygonaceae	
<i>Rumex patientia</i>	Patience Dock*
Order: PRIMULALES	
Family: Primulaceae	
<i>Lysimachia terrestris</i>	Yellow Loosestrife
Order: RANALES (RANUNCULALES)	
Family: Berberidaceae	

<i>Podophyllum peltatum</i>	May Apple
Family: Lauraceae	
<i>Sassafras albidum</i>	Sassafras
Family: Nymphaeaceae	
<i>Nymphae odorata</i>	Bullhead Lily
Family: Ranunculaceae	
<i>Actaea pachypoda</i>	White Baneberry
<i>Ranunculus acris</i>	Buttercup*
<i>Thalictrum polygamum</i>	Tall Meadow Rue
Order: RHAMNALES	
Family: Rhamnaceae	
<i>Rhamnus alnifolia</i>	Alderleaf Buckthorn
Order: RHOEADALES (PAPAVERALES)	
Family: Cruciferae	
<i>Cardamine pensylvanica</i>	Pennsylvania Bittercress
Order: ROSALES	
Family: Hamamelidaceae	
<i>Hamamelis virginiana</i>	Witch-hazel
Family: Leguminosae	
<i>Vicia cracca</i>	Cow Vetch*
Family: Rosaceae	
<i>Geum canadense</i>	White Avens
<i>Geum</i> sp.	Avens
<i>Potentilla palustris</i>	Marsh Cinquefoil
<i>Potentilla simplex</i>	Common Cinquefoil
<i>Prunus serotina</i>	Black Cherry
<i>Rubus allegheniensis</i>	Blackberry
<i>Rubus</i> sp.	Bramble
<i>Rubus</i> sp.	Bramble
<i>Spiraea latifolia</i>	Meadow Sweet
<i>Waldsteinia fragarioides</i>	Barren Strawberry*
Unknown #9	
Order: RUBIALES	
Family: Caprifoliaceae	
<i>Viburnum alnifolium</i>	Hobble Bush
<i>Viburnum recognitum</i>	Northern Arrowwood
Order: SAPINDALES	
Family: Aceraceae	
<i>Acer pensylvanicum</i>	Striped Maple
<i>Acer rubrum</i>	Red Maple
Family: Balsaminaceae	
<i>Impatiens capensis</i>	Jewel Weed
Order: SPATHIFLORAE (ARALE)	
Family: Araceae	
<i>Arisaema stewardsonii</i>	Jack-in-the-pulpit
Order: TUBIFLORAE (POLEMONIALES)	

Family: Labiatae	
<i>Agastache foeniculum</i>	Blue Giant Hyssop
<i>Prunella vulgaris</i>	Heal-all*
<i>Scutellaria epilobiifolia</i>	Common Skullcap
<i>Scutellaria lateriflora</i>	Mad-dog Skullcap
Family: Scrophulariaceae	
<i>Veronica americana</i>	American Brooklime
<i>Veronica officinalis</i>	Common Speedwell+
<i>Veronica scutellata</i>	Marsh Speedwell
Family: Verbenaceae	
<i>Verbena hastata</i>	Blue Vervain
Unknown #2	

Unknown #3

Unknown #4

Unknown #8

*Alien Species

+Alien in part

Table 6. Plants collected during this study: Roadside.

Order: CAMPANULATAE	
Family: Compositae	
<i>Erigeron annuus</i>	Daisy Fleabane
Order: CENTROSPERMAE (CARYOPHYLLALES)	
Family: Caryophyllaceae	
<i>Stellaria graminea</i>	Lesser Stitchwort*
Order: GLUMIFLORAE (GRAMINALES)	
Family: Graminae	
<i>Agropyron trachycaulum</i>	Slender Wheat Grass
Unknown #1	
Order: ROSALES	
Family: Leguminosae	
<i>Lotus corniculatus</i>	Birdfoot Trefoil*
<i>Vicia cracca</i>	Cow Vetch*
Family: Rosaceae	
<i>Potentilla norvegica</i>	Rough Cinquefoil
<i>Potentilla recta</i>	Rough Fruited Cinquefoil*
Family: Scrophulariaceae	
<i>Linaria vulgaris</i>	Butter and Eggs*
Order: UMBELLIFLORAE (UMBELLALES)	
Family: Umbelliferae	
<i>Daucus carota</i>	Wild Carrot*

*Alien species

RESULTS

A taxonomic list was compiled for each area (Tables 1-6). Identification was as complete as possible; however, because of time and experience constraints, several plants were left unidentified, or identified only as far as family or genus. All findings are subject to faculty verification.

DISCUSSION

From the plants collected and the observations made during the collecting, it can be surmised that there are three predominate communities in quadrants E3 and E4. The areas on the west side identified as "above gate" and "below gate", where 94 and 81 different species were recorded, and most of the east side, where 81 species were recorded, were found to be maturing forests. With the exception of "west side above gate", an area slightly more mature than the others, the dominant plants in these areas were members of the Pinaceae, although smaller hardwoods were beginning to take over. "Above gate" hardwoods were more intrusive, but many pines remained. The other ecosystems were the wet wooded and meadowed areas along the edge of the bog. In the smaller "E3 west side bog" section, where 84 species were collected, both hardwoods and pines co-existed with wetland tolerant plants such as Blue Flag, Marsh St. Johnswort, and Marsh Cinquefoil. The "E4 west side bog", where 39 species were collected, and the bog edge on the east side had many similar plants to the "E3 west side bog". However, few trees were in either of these sections. Instead grasses, sedges, and wildflowers dominated this area.

Many of the plants collected in this area could be used for food or medicine. Forty-one of the species collected could in some way be used for food (Table 7), while twenty-four species could be prepared homeopathically to be used as medicine (Table 8).

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Table 7. Plants collected during this study that can in some way be used for food.

Common Elderberry
May Apple
Trillium
Water Cress
Pennsylvania Bittercress
Common Wood-sorrel
Yellow Wood-sorrel
Wild Strawberries
Brambles (blackberries, raspberries, etc.)
Chickweeds
Partridgeberry
Wild Carrot
Plantains
False Solomon's-seal
Wild Mint
Ox-eye Daisy
Bullhead Lily
Winter Cress
Indian Cucumber Root
Hop Clover
Sweet Goldenrod
Spotted Touch-me-not
Musk Mallow
Common Milkweed
Burdock
Thistles
American Brooklime
Violets
Blue Vervain
Mints
Giant Blue Hyssop
Jack-in-the-Pulpit
Birches
Beech
Chestnut
Oaks
Sassafras
Gooseberry
Hawthorns
Blueberries
Bracken Fern fiddlehead

Table 8. Plants collected during this study that can be prepared homeopathically to be used medicinally.

Jack-in-the-Pulpit
Deadly Nightshade
Virgin's Bower
Hawthorn berries
Fleabane
Wood Strawberry
White Ash
Witch-hazel
St. Johnswort
Blue Flag
Common Rush
Burdock
Lycopodium
Yarrow
Partridgeberry
Plantain
May Apple
Buttercup
Skullcap
Goldenrod
Valerian
Blue Vervain

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